

ABSTRACT OF THE DISCLOSURE

An optical element is arranged between a planar lighting element and a liquid crystal panel for collecting light that exits from the planar lighting element.

- 5 The optical element has an incidence plane and a plurality of protrusions. The light that exits from the planar lighting element enters into the optical element. A plurality of the protrusions is provided on a surface facing the incidence plane. Substantially all the protrusions are each arranged in a one-to-one correspondence with an opening of a respective pixel of the liquid crystal panel.